March 31th 2008, J. Wresnik Plot added on April 1st 2008

Comparison of uniformsky schedules with different optimization options and different network sizes

Specifications:

schedules: st32uni_45_9_230X_0_0

software: OCCAM Kalman

clk: ASD 1e-14 @ 50 min, random walk + integrated random walk

zwd: Vienna turbulence (standard)

Vienna turbulence with more wind at RIOP

wn: 4 ps per baseline

zwd: 0.7 grd: 0.5

The baseline length repeatabilities for the 32 station network showed a bad behavior for the all baselines with the station RIOP. The Cn value of RIOP used for the simulation of the turbulence atmospheres was Cn:2,47 and the wind speed was North: -0.15 and East: -1.24 m/s. I changed only the wind speed and direction for the station RIOP to North -5.15 and East -3.24 m/s.

You can see the changes in the baseline length repeatabilities in the Figure 1 for the whole network. Figure 2 shows the baseline length repeatabilities for all baselines with RIOP. The blue diamonds are the repatabilities for the changed atmosohere.

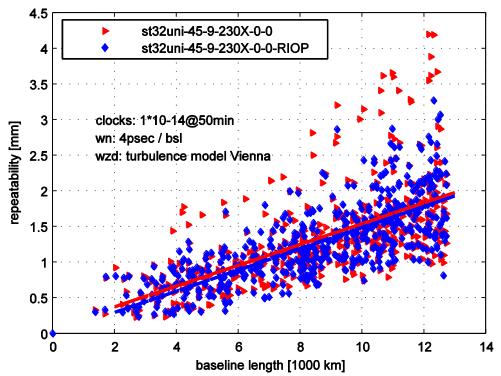


Figure 1 Basline length repeatabilities for the schedule st32uni_45_9_230X_0_0, with different wind speeds at station RIOP. In red the low wind speed is given and in blue the higher one.

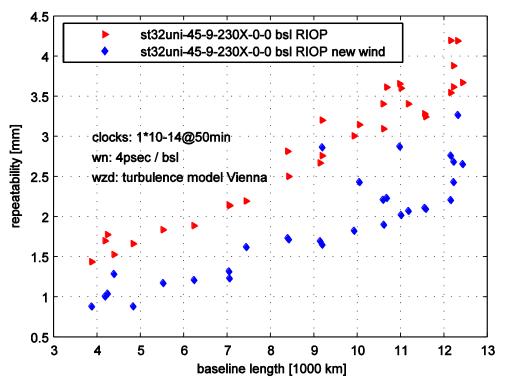


Figure 2: Baseline length repeatabilities for baselines with the station RIOP of the schedule st32uni_45_9_230X_0_0, with different wind speeds at station RIOP. In red the low wind speed is given and in blue the higher one.